

B1
end
the release of the residual stress includes exposing the investigation area of the object to a electric current pulse.

B2
10. (Once Amended) A device for performing measurements of residual stresses of an object, comprising:

~~B3~~
a control unit, wherein the control unit is configured to generate coherent light and split the coherent light into a reference beam and an object beam;

a probe connected to the control unit by a first light guidance cable, wherein the probe is configured to receive the object beam from the control unit, illuminate an investigation area of an object with the object beam, collect a reflected object beam from the investigation area, and induce a release of the residual stresses in the investigation area; and

a holographic camera connected to the control unit by a second light guidance cable and connected to the probe by a third light guidance cable, wherein the holographic camera is arranged to receive the reference beam from the control unit, receive the reflected object beam from the probe, generate a hologram based on the reference beam and the reflected object beam, and generate an interferogram of the investigation area where in the probe is movable with respect to the control unit.
